



Pilot randomized single-blind clinical trial, craniosacral therapy vs control on physiological reaction to math task in male athletes

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Abstract

Objectives

The purpose of this study was to explore how osteopathic treatments influence certain measurable aspects of stress performance in male athletes.

Design and participants

Twenty-two (22) healthy male athletes ($21,63 \pm 1,41$ years), participated in the study and were randomly allocated to either a craniosacral therapy or placebo group with 11 participants receiving a craniosacral therapy session, and the other 11 a placebo session. Pre- and post-intervention psychophysiological correlates of stress reaction (skin conductance - SC, heart rate – HR and respiratory rate – RR) were measured.

Results

Stress induced from an arithmetic task resulted in a significant increase in physiological stress markers such as SC, HR and RR in both groups. Over the short term, craniosacral therapy was associated with a physiological relaxation response (a decrease in HR and SC) and an altered HR and SC response during the math task in comparison to the placebo group.

Conclusions

At least over the short term, the results of this study indicate that participating in 20-min exposure to craniosacral treatment may benefit participants by decreasing heart rate reactivity and skin conductance reactivity. Further research, with some modifications, using a larger sample is required to determine the effectiveness of craniosacral therapy for immediate stress reduction of athletes.

Keywords

Craniosacral therapy

Osteopathy

Heart rate

Skin conductance

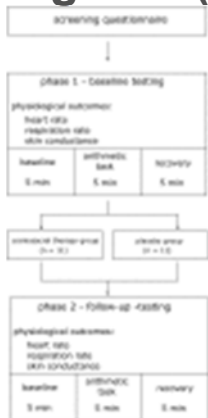
Stress response

Mental task

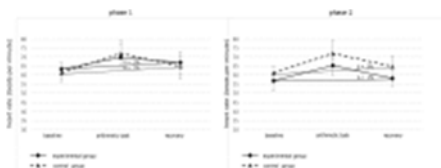
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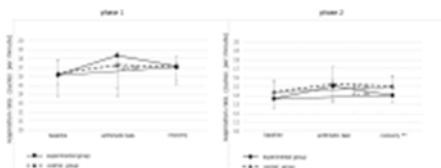
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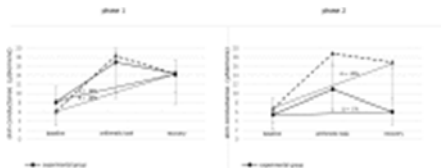
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